



GROUP	43	FUNGICIDE
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**REDLINE COPY**

[Bracketed text is optional]

# V-10161 4 SC

## Fungicide

FOR CONTROL AND/OR SUPPRESSION OF CERTAIN DISEASES IN **BASIL**, **BRASSICA (COLE) LEAFY VEGETABLE**, **BULB VEGETABLES**, **CITRUS FRUIT**, **CUCURBIT VEGETABLES**, **FRUITING VEGETABLES**, **GRAPES (INCLUDING FRUIT, SMALL, VINE CLIMBING, EXCEPT FUZZY KIWIFRUIT, SUBGROUP)**, **HOPS**, **LEAFY VEGETABLES (EXCEPT BRASSICA VEGETABLES)**, **NON-BEARING FRUIT TREES**, **NON-BEARING NUT TREES**, **ROOT AND TUBER VEGETABLES [EXCEPT POTATO]**, **SUCCULENT BEANS** AND **TOBACCO**; AND FOR CONTROL OF **PYTHIUM** AND **PHYTOPHTHORA** ON **ORNAMENTALS** AND **TURFGRASS**

Active Ingredient	By Wt
*Fluopicolide.....	39.5%
Other Ingredients .....	60.5%
Total	100.0%

\*2,6-dichloro-N-[[3-chloro-5-(trifluoromethyl)-2-pyridinyl]methyl]benzamide

V-10161 4 SC Fungicide is a suspendable concentrate fungicide containing 4 lbs active ingredient per gallon.

**KEEP OUT OF REACH OF CHILDREN**

## CAUTION

**SEE NEXT PAGE FOR ADDITIONAL PRECAUTIONARY STATEMENTS.**

**NET CONTENT \_\_\_\_**

**SHAKE WELL BEFORE USING**  
**AGITESE BIEN ANTE USO**

EPA Reg. No. 59639-140  
EPA Est. \_\_\_\_\_

## PRECAUTIONARY STATEMENTS

### HAZARDS TO HUMANS & DOMESTIC ANIMALS

### CAUTION

Harmful if swallowed, inhaled or absorbed through skin. Causes moderate eye irritation. Avoid contact with skin, eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum or using tobacco. Wear long-sleeved shirt and long pants, socks, shoes and gloves. Remove and wash contaminated clothing before reuse. Avoid breathing vapor or spray mist.

FIRST AID	
<b>If on skin or clothing:</b>	<ul style="list-style-type: none"><li>• Take off contaminated clothing.</li><li>• Rinse skin immediately with plenty of water for 15-20 minutes.</li><li>• Call a poison control center or doctor for further treatment advice</li></ul>
<b>If inhaled:</b>	<ul style="list-style-type: none"><li>• Move person to fresh air.</li><li>• If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible.</li><li>• Call a poison control center or doctor for further treatment advice.</li></ul>
<b>If swallowed:</b>	<ul style="list-style-type: none"><li>• Call a poison control center or doctor immediately for treatment advice.</li><li>• Have person sip a glass of water if able to swallow.</li><li>• Do not induce vomiting unless told to do so by the poison control center or doctor.</li><li>• Do not give anything to an unconscious person.</li></ul>
<b>If in eyes:</b>	<ul style="list-style-type: none"><li>• Hold eye open and rinse slowly and gently with water for 15-20 minutes.</li><li>• Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye.</li><li>• Call a poison control center or doctor for treatment advice.</li></ul>
<b>HOT LINE NUMBER</b> Have the product container or label with you when calling a poison control center or doctor, or going for treatment. You may also contact <b>800-892-0099</b> for emergency medical treatment information.	

### PERSONAL PROTECTIVE EQUIPMENT (PPE)

Some of the materials that are chemical-resistant to this product are listed below. If you want more options, follow the instructions for category A on an EPA chemical-resistance category selection chart.

**Applicators and other handlers must wear:** long-sleeved shirt and long pants, chemical-resistant gloves made of any waterproof material such as natural rubber  $\geq$  14 mils, socks and shoes.

### **USER SAFETY RECOMMENDATIONS**

Users should:

- Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet.
- Remove clothing immediately if pesticide gets inside. Then wash thoroughly and put on clean clothing.
- Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

### **ENVIRONMENTAL HAZARDS**

This pesticide is toxic to fish and aquatic invertebrates. Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Drift and runoff from treated areas may be hazardous to aquatic organisms in water adjacent to treated areas. Do not contaminate water by disposing of equipment washwaters or rinsate.

### **DIRECTIONS FOR USE**

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

**READ ENTIRE LABEL. USE STRICTLY IN ACCORDANCE WITH PRECAUTIONARY STATEMENTS AND DIRECTIONS, AND WITH APPLICABLE STATE AND FEDERAL REGULATIONS.**

Do not apply this product in a way that will contact workers or other persons, either directly or through drift. Only protected handlers may be in the area during application. For any requirements specific to your State or Tribe, consult the agency responsible for pesticide regulation.

### **AGRICULTURAL USE REQUIREMENTS**

Use this product only in accordance with its labeling and with the Worker Protection Standard (WPS), 40 CFR part 170. This Standard contains requirements for the protection of agricultural workers on farms, forests, nurseries, and greenhouses and handlers of agricultural pesticides. It contains requirements for training, decontamination, notification and emergency assistance. It also contains specific instructions and exceptions pertaining to the statements on this label about personal protective equipment (PPE) and restricted-entry interval (REI). The requirements in this box only apply to uses of this product that are covered by the Worker Protection Standard.

Do not enter or allow worker entry into treated areas during the restricted-entry interval (REI) 12 hours.

PPE required for early entry to treated areas that is permitted under the Worker Protection Standard and that involves contact with anything that has been treated, such as plants, soil or water, is: coveralls, chemical resistant gloves made of any waterproof material such as natural rubber  $\geq$  14 mils, socks and shoes.

### **NON-AGRICULTURAL USE REQUIREMENTS**

The requirements in this box apply to uses of this product that are **NOT** within the scope of the Worker Protection Standard for agricultural pesticides (40 CFR Part 170). The WPS applies when this product is used to produce agricultural plants on farms, forests, nurseries, greenhouses or sodfarms.

Keep all unprotected persons out of operating areas or vicinity where there may be drift.  
Do not enter treated areas without protective clothing until sprays have dried.

**DISCLAIMER, RISKS OF USING THIS PRODUCT,  
LIMITED WARRANTY  
AND LIMITATION OF LIABILITY**

**IMPORTANT:** Read the entire Label including this Disclaimer, Risks of Using this Product, Limited Warranty, and Limitation of Liability before using this product. If the terms are not acceptable THEN DO NOT USE THE PRODUCT; rather, return the unopened product within 15 days of purchase for a refund of the purchase price.

**RISKS OF USING THIS PRODUCT**

The Buyer and User (referred to collectively herein as "Buyer") of this product should be aware that there are inherent unintended risks associated with the use of this product which are impossible to eliminate. These risks include, but are not limited to, injury to plants and crops to which this product is applied, lack of control of the target pests or weeds, resistance of the target pest or weeds to this product, injury caused by drift, and injury to rotational crops caused by carryover in the soil. Such risks of crop injury, non-performance, resistance or other unintended consequences are unavoidable and may result because of such factors as weather, soil conditions, disease, moisture conditions, irrigation practices, condition of the crop at the time of application, presence of other materials either applied in the tank mix with this product or prior to application of this product, cultural practices or the manner of use or application, (or a combination of such factors) all of which are factors beyond the control of Valent. The Buyer should be aware that these inherent unintended risks may reduce the harvested yield of the crop in all or a portion of the treated acreage, or otherwise affect the crop such that additional care, treatment and expense are required to take the crop to harvest. If the Buyer chooses not to accept these risks, THEN THIS PRODUCT SHOULD NOT BE APPLIED. By applying this product Buyer acknowledges and accepts these inherent unintended risks AND TO THE EXTENT CONSISTENT WITH APPLICABLE LAW AGREES THAT ALL SUCH RISKS ASSOCIATED WITH THE APPLICATION AND USE ARE ASSUMED BY THE BUYER.

Valent shall not be responsible for losses or damages (including, but not limited to, loss of yield, increased expenses of farming the crop or such incidental, consequential or special damages that may be claimed) resulting from use of this product in any manner not set forth on the label. To the extent consistent with applicable law buyer assumes all risks associated with the use of this product in any manner or under conditions not specifically directed or approved on the label.

**LIMITED WARRANTY**

Valent warrants only that this product conforms to the chemical description on the label and is reasonably fit for the purposes stated in the label, under average use conditions, when used strictly in accordance with the label **and subject to the Risks of Using This Product as described above. To the extent consistent with applicable law AND AS SET FORTH ABOVE, VALENT MAKES NO OTHER WARRANTIES, EITHER EXPRESSED OR IMPLIED.** No agent or representative of Valent or Seller is authorized to make or create any other express or implied warranty.

**LIMITATION OF LIABILITY**

To the extent consistent with applicable law Valent or Seller is not liable for any incidental, consequential, indirect or special damages resulting from the use or handling of this product. The limitation includes, but is not limited to, loss of yield on all or any portion of the treated acreage, increased care, treatment or other expenses required to take the crop to harvest, increased finance charges or altered finance ratings, emotional or mental distress and/or exemplary damages. TO THE EXTENT CONSISTENT WITH APPLICABLE LAW, THE EXCLUSIVE REMEDY OF THE BUYER, AND THE EXCLUSIVE MAXIMUM LIABILITY OF VALENT OR SELLER FOR ANY AND ALL CLAIMS, LOSSES, INJURIES OR DAMAGES (INCLUDING CLAIMS BASED ON BREACH OF WARRANTY, CONTRACT, NEGLIGENCE, TORT, STRICT LIABILITY OR OTHERWISE) RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT SHALL BE THE RETURN OF THE PURCHASE PRICE OF THIS PRODUCT OR, AT THE ELECTION OF VALENT OR SELLER, THE REPLACEMENT OF THE PRODUCT.

**PROMPT NOTICE OF CLAIM**

To the extent consistent with applicable law allowing such requirements, Valent must be provided notice as soon as Buyer has reason to believe it may have a claim, but in no event later than twenty-one days from date of planting, or twenty-one days from the date of application, whichever is later, so that an immediate inspection of the affected property and growing crops can be made.

To the extent consistent with applicable law, if Buyer does not notify Valent of any claims, in such period, it shall be barred from obtaining any remedy.

**NO AMENDMENTS**

Valent and Seller offer this product, and Buyer accepts it, subject to the foregoing **Disclaimer, Risks of Using This Product, Limited Warranty** and **Limitation of Liability**, which may not be modified by any oral or written agreement.

**TANK MIXES**

NOTICE: Tank mixing or use of this product with any other product which is not specifically and expressly authorized by the label shall be the exclusive risk of user, applicator and/or application advisor, consistent with applicable law.

**Read and follow the entire label of each product to be used in the tank mix with this product.**

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## USE INFORMATION

V-10161 4 SC Fungicide is formulated as 4 lbs ai/gal suspendable concentrate (SC). The active ingredient in V-10161 4 SC Fungicide is fluopicolide. V-10161 4 SC Fungicide exhibits protective, curative, eradicated and antispore activity. Fluopicolide is locally systemic and translaminal and also moves systemically via xylem tissue.

V-10161 4 SC Fungicide is most effective when applied in a regularly scheduled spray program used in combination and/or rotation with other effective fungicides that have different modes of action (i.e., non group 43 fungicides).

## RESTRICTIONS AND LIMITATIONS

- Do not apply to greenhouse food crops.
- Do not apply this product when weather conditions favor spray drift from treated areas.
- When applying by air, observe drift management restrictions and precautions listed under "AERIAL APPLICATION". Best control is achieved through ground application.
- It is the responsibility of the applicator to ensure that spray drift does not occur from the application site. The interaction of many equipment and weather related factors determine the potential for spray drift. The applicator is responsible for considering all of these factors when making decisions. Where states have more stringent regulations, they must be followed.

## MODE OF ACTION

V-10161 4 SC Fungicide is active against selective oomycetes. It exhibits the typical mode of action of specific systemic fungicides against oomycete fungi affecting several steps in the reproduction cycle.

Biochemical studies have shown that fluopicolide has an effect on spectrin-like proteins, believed to play a role in maintaining the membrane stability in ascomycete fungi or oomycetes, especially during hyphal tip extension. Microscopy studies demonstrate that fluopicolide induces a quick redistribution of these proteins from the membrane to the cytoplasm in both hyphae and zoospores.

## RESISTANCE MANAGEMENT

V-10161 4 SC Fungicide contains fluopicolide, a group 43 Fungicide. The target site of action of group 43 fungicides is specific but the detailed, biochemical mode of action is not known. Fungal isolates with acquired resistance to fluopicolide may eventually dominate the fungal population if fluopicolide is used repeatedly and not rotated or combined with fungicides of a different mode of action. Repeated use may result in partial or total loss of control of these pathogens by fluopicolide. To maintain the performance of V-10161 4 SC Fungicide, do not exceed the labeled number of sequential or seasonal applications in the "CROP SPECIFIC REQUIREMENTS". Adhere to the label instructions regarding the consecutive use of V-10161 4 SC Fungicide. Follow the recommendations below to delay the development of fungicide resistance:

- **Tank Mixtures:** When tank mixing is required in the crop specific use instructions, use a fungicide from a different target site of action group that **are** registered for the same use and that is effective against the pathogens of concern. Use at least the minimum labeled rates of each fungicide in the tank mix.

- **Integrated Pest Management (IPM):** Integrate *V-10161 4 SC Fungicide* into a multi-faceted disease and pest management program. Follow cultural practices known to reduce disease development. Consult your local extension specialist, certified crop advisor and/or Valent representative for additional IPM strategies established for your area. *V-10161 4 SC Fungicide* may be used in Agricultural Extension advisory (disease forecasting) programs which recommend application timing based on environmental factors favorable for disease development.
- **Monitoring:** Monitor efficacy of all fungicides used in the disease management program against the targeted pathogen and record other factors that may influence fungicide performance and/or disease development.
- **Reporting:** If a Group 43 target site fungicide appears to be less effective or no longer effective against a pathogen that it previously controlled or suppressed, contact a Valent representative, local extension specialist or certified crop advisor to assist in determining the cause of reduced performance.

### **RAINFASTNESS**

Foliar sprays are rainfast 2 hours after application. Applications for foliar disease control must not be made if measurable rain is expected within 2 hours of application or foliar disease control may be reduced.

### **JAR TEST TO DETERMINE COMPATIBILITY OF ADJUVANTS AND *V-10161 4 SC Fungicide***

Perform a jar test before mixing commercial quantities of *V-10161 4 SC Fungicide*, when using *V-10161 4 SC Fungicide* for the first time, or when a new water source is being used.

1. Add 1 pt of water plus adjuvant to a quart jar. Use water from the same source and temperature as water that will be used in the spray tank mixing operation.
2. Add 2.5 ml (1/2 tsp) of *V-10161 4 SC Fungicide* to the quart jar, gently mix until product goes into suspension.
3. Place cap on jar, invert 10 times, let stand for 15 minutes, evaluate.
4. An ideal tank mix combination will be uniform and free of suspended particles. If any of the following conditions are observed reevaluate the choice of adjuvant:
  - a) Layer of oil or globules on the mixture's surface.
  - b) Flocculation: fine particles in suspension or as a layer on the bottom of the jar.
  - c) Clabbering: thickening texture (coagulated) like gelatin.

## **APPLICATION INSTRUCTIONS**

### **SPRAYER PREPARATION**

Before applying *V-10161 4 SC Fungicide*, start with clean, well maintained application equipment. The spray tank, hoses and booms must be cleaned to ensure no residue from the previous spraying operation remains in the sprayer. The spray equipment must be cleaned according to the manufacturer's directions for the last product used before the equipment is used to apply *V-10161 4 SC Fungicide*. If two or more products were tank mixed prior to *V-10161 4 SC Fungicide* application, follow the most restrictive cleanup procedure.



## MIXING INSTRUCTIONS

1. Fill clean spray or nurse tank 1/2 to 2/3 of desired level with clean water.
2. While agitating, slowly add the V-10161 4 SC Fungicide to the tank. Adequate agitation will create a rippling or rolling action on the water surface.
3. When tank mixing V-10161 4 SC Fungicide with other labeled pesticides, add water soluble packets first, followed by dry formulations, flowables, emulsifiable concentrates and then solutions. When tank mixing, follow the label directions for the most restrictive of label precautions and limitations.
4. Add any required adjuvants.
5. Fill tank to desired level with water. Continue to agitate until all spray solution has been used or applied.

## SPRAYER CLEANUP

Spray equipment must be cleaned following application of V-10161 4 SC Fungicide. After V-10161 4 SC Fungicide is applied, the following steps must be used to clean the spray equipment:

1. Completely drain the spray tank, rinse the sprayer thoroughly, including the inside and outside of the tank and all in-line screens.
2. Fill the spray tank with clean water and flush all hoses, booms, screens and nozzles.
3. Drain tank completely.
4. Remove all nozzles and screens and rinse them in clean water.
5. The rinsate solution may be applied to the crops listed on this label. Do not exceed the maximum labeled use rate. If cleaners are used, consult the cleaner label for disposal instructions. If no instructions are given, dispose of rinsate at an approved waste disposal facility.

## APPLICATION EQUIPMENT

Keep application equipment clean and in good repair. Check nozzles frequently for accuracy.

## CARRIER VOLUME

Apply V-10161 4 SC Fungicide in sufficient water to ensure thorough coverage of foliage, bloom and fruit. Thorough coverage is required for optimal disease control. For ground application, apply a minimum of 20 gallons of spray mixture per acre and for aerial application, do not apply less than 5 gallons of spray mixture per acre to assure uniform coverage. Follow individual "CROP SPECIFIC REQUIREMENTS" for appropriate spray volumes.

## AERIAL APPLICATION

To minimize spray drift, apply the largest droplet size consistent with uniform coverage and satisfactory disease control. Do not apply during low-level inversion conditions, when winds are gusty or under other conditions that favor drift. Do not spray when wind velocity is less than 2 mph or more than 10 mph.

- **Carrier Volume and Spray Pressure:** Application at less than 5 gals per acre may provide inadequate coverage and control. The higher gallonage applications generally afford more consistent disease control. Do not exceed the nozzle manufacturer's recommended pressures. For many nozzle types, lower pressure produces larger droplets. When higher flow rates are needed, use higher flow rate nozzles instead of increasing pressure.
- **Nozzle Selection and Orientation:** Formation of very small drops may be minimized by appropriate nozzle selection, by orienting nozzles away from the air stream as much as possible and by avoiding excessive spray pressure. Use nozzles that produce flat fan or cone spray patterns. Use non-drip type nozzles, such as diaphragm type nozzles, to avoid

unwanted discharge of spray solution. The nozzles must be directed toward the rear of the aircraft, producing a spray discharge at an angle between 0 and 15° downward. Do not place nozzles on the outer 25% of the wings or rotors.

- **Adjuvants and Drift Control Additives:** Refer to tank mix partner's label for information on adjuvant usage. Drift control additives may be used although it is better to obtain coarser sprays through appropriate nozzle selection and use wherever possible. When a drift control additive is used, read and carefully observe the cautionary statements and all other information appearing on the additive label, and be certain of compatibility with the tank mix and nozzle types being used before selecting any adjuvant types.

### **CHEMIGATION (SPRINKLER IRRIGATION)**

V-10161 4 SC Fungicide may be applied through sprinkler irrigation and injection (drip irrigation) systems mainly for soilborne infections. Follow all label requirements regarding application rates, timing of application, special instructions and precautions.

For chemigation applications apply this product only through center pivot, solid set, hand move and injection (drip irrigation) systems. Do not apply this product through any other type of irrigation system.

Crop injury, lack of efficacy or illegal pesticide residues in the crop can result from non-uniform distribution of treated water.

The system must be properly calibrated (with water only) to ensure that the amount of V-10161 4 SC Fungicide applied corresponds to the required rate on this label for the crop being chemigated.

Apply V-10161 4 SC Fungicide in 1/2 to 3/4 inches of water during the first sprinkler set. Allow time for all lines to flush the fungicide through all nozzles before turning off irrigation water. To ensure the lines are flushed and free of remaining fungicide, a dye indicator may be injected into the lines to mark the end of the application period.

If you have any questions about calibration, contact your State Extension Specialist, equipment manufacturers or other experts.

### **Chemigation of Turf and Ornamentals**

For chemigation to turfgrass sites, apply this product only through center pivot, solid set, hand move or moving wheel irrigation systems. Apply V-10161 4 SC Fungicide in 1/2 to 3/4 inches of water during the first sprinkler set.

For chemigation to ornamental sites apply this product only through microirrigation (individual spaghetti tube), drip irrigation, overhead irrigation or motorized calibrated irrigation equipment.

### **Special Precautions for Chemigation**

1. Do not connect an irrigation system used for pesticide application to a public water system unless the pesticide label-prescribed safety devices for public water systems are in place.
2. A person knowledgeable of the chemigation system and responsible for its operation or under the supervision of that person, shall shut the system down and make necessary adjustments .
3. The system must be free of leaks and clogged nozzles.
4. The pesticide must be supplied continuously for the duration of the aqueous application. An uneven application may cause injury to the crop or poor control.
5. Agitation must be maintained in the nurse tank.

6. The sprinkler chemigation system must contain a functional check valve, vacuum relief valve and low pressure drain appropriately located on the irrigation pipeline to prevent water source contamination from backflow.
7. The pesticide injection pipeline must contain a functional, automatic, quick closing check valve to prevent the flow of fluid back toward the injection pump.
8. The pesticide injection pipeline must contain a functional, normally closed, solenoid operated valve located on the intake side of the injection pump and connected to the system interlock to prevent fluid from being withdrawn from the supply tank when the irrigation system is either automatically or manually shut down.
9. The system must contain functional interlocking controls to automatically shut off the pesticide injection pump when the water pump motor stops, or in the case where there is no water pump, when the water pressure decreases to the point where pesticide distribution is adversely affected.
10. The irrigation line or water pump must include a functional pressure switch which will stop the water pump motor when the water pressure decreases to the point where pesticide distribution is adversely affected.
11. Systems must use a metering pump, such as a positive displacement injection pump (e.g., diaphragm pump), effectively designed and constructed of materials that are compatible with the pesticides being used and capable of being fitted with a system interlock.
12. Do not apply when wind speed favors drift beyond the area intended for treatment.

#### **Chemigation Systems Connected to Public Water Systems**

1. Public water system means a system for the provision to the public of piped water for human consumption, if such a system has at least 15 service connections or regularly serves an average of at least 25 individuals daily at least 60 days out of the year.
2. Chemigation systems connected to the public water system must contain a functional, reduced pressure zone (RPZ), backflow preventer or the functional equivalent in the water supply line upstream from the point of pesticide introduction. As an option to the RPZ, discharge the water from the public water system into a reservoir tank prior to pesticide introduction. There shall be a complete physical break (air gap) between the outlet end of the fill pipe and the top overflow rim of the reservoir tank of at least twice the inside diameter of the fill pipe.
3. All chemigation systems connected to the public water system must also follow restrictions listed in the preceding section titled "Special Precautions for Chemigation".

## ROTATIONAL RESTRICTIONS

The following rotational crops may be planted after applying V-10161 4 SC Fungicide at the labeled rate. Planting earlier than the labeled rotational interval is not allowed.

CROPS	ROTATIONAL INTERVAL
Basil Brassica (Cole) Leafy Vegetables Bulb Vegetables Citrus Fruit Cucurbit Vegetables Fruiting Vegetables Grapes (including Subgroup 13-07F) Hops Leafy Vegetables (Except Brassica) Root and Tuber Vegetables Beans, Succulent Tobacco	Immediately
Corn Wheat	30 days
All Other Crops	18 months

## SPECIFIC REQUIREMENTS – All Crops

**When to Apply:** Begin application when crop and/or environmental conditions favor disease development. Make applications on a 7- to 14-day interval, depending on disease pressure, unless otherwise noted under crop specific use instructions. Under severe disease pressure or if rain is expected, use the higher labeled rate and shortest interval. Apply as a foliar spray in sufficient water to obtain thorough coverage. Chemigation is not recommended when the primary disease is downy mildew or other foliar diseases.

**Resistance Management:** V-10161 4 SC Fungicide must be used as part of an Integrated Pest Management (IPM) program. When tank mixing is required in the crop specific use instructions, use with another labeled fungicide product with a different mode of action on the target pathogen in sufficient water to obtain thorough coverage.

### Restrictions and Limitations

- The maximum V-10161 4 SC Fungicide application rate is 4 fl oz per acre per application and 12 fl oz per acre per season.
- Apply no more than 2 sequential applications of V-10161 4 SC Fungicide before alternating with an effective fungicide from a different resistance management group unless otherwise noted under crop specific use instructions.
- Do not make more than 4 applications of V-10161 4 SC Fungicide per acre per season unless otherwise noted under crop specific use instructions.
- In Hawaii: Apply V-10161 4 SC Fungicide by foliar and chemigation (sprinkler irrigation) only.

continued

**SPECIFIC REQUIREMENTS – All Crops** (continued)

Crops	Diseases	Application Rates		Minimum Time from Last Application to Harvest (PHI)	Specific Use Instructions
		fl oz/A	GPA Spray Mixture		
<b>Basil</b> [*]	Downy Mildew ( <i>Peronosporabelbahrii</i> )	4 (0.125 lb ai/A)	Ground: Minimum 20  Aerial: Minimum 5	1 day	<b>[Resistance Management]</b> [V-10161 4 SC Fungicide must be tank mixed with a labeled rate of another fungicide active against the target pathogen, but with a different mode of action.]  Make foliar applications on a 7- to 14-day schedule beginning when conditions are favorable, but prior to disease development.

[\*Not for use in California.]

**SPECIFIC REQUIREMENTS – All Crops** (continued)

Crops	Diseases	Application Rates		Minimum Time from Last Application to Harvest (PHI)	Specific Use Instructions
		fl oz/A	GPA Spray Mixture		
<p><b>[*]Beans, Succulent</b> Including Cicer arietinum (chickpea, garbanzo bean); Lupinus spp. (including sweet lupine, white sweet lupine, white lupine and grain lupine); Phaseolus spp. (including kidney bean, lima bean, mung bean, navy bean, pinto bean, snap bean and waxbean); Vicia faba (broad bean and fava bean); Vigna spp. (including asparagus bean, blackeyed pea and cowpea)</p>	<p>Phytophthora Root Rot (<i>Phytophthora parasitica</i>)</p> <p>Phytophthora Blight (<i>Phytophthora capsici</i>)</p>	<p>4 (0.125 lb ai/A)</p>	<p>Ground: Minimum 30</p> <p>Aerial: Minimum 5</p>	<p>0 day</p>	<p><b>Resistance Management</b> V-10161 4 SC Fungicide must be tank mixed with a labeled rate of another fungicide active against the target pathogen, but with a different mode of action.</p> <p>Make foliar applications on a 7- to 14-day schedule beginning when conditions are favorable, but prior to disease development.</p>

[\*Not for use in California.]

continued

### SPECIFIC REQUIREMENTS – All Crops (continued)

Crops	Diseases	Application Rates		Minimum Time from Last Application to Harvest (PHI)	Specific Use Instructions
		fl oz/A	GPA Spray Mixture		
<b>Brassica (Cole) Leafy Vegetables including:</b> Broccoli, Broccoli Raab (rapini), Brussels Sprouts, Cabbage, Cauliflower, Cavalo Broccolo, Chinese Broccoli (gai lon), Chinese Cabbage (bok choy), Chinese (napa) Cabbage, Chinese Mustard Cabbage (gai choy), Collards, Kale, Kohlrabi, Mizuna, Mustard Greens, Mustard Spinach, Rape Greens	Downy Mildew ( <i>Peronospora parasitica</i> )  Damping-off ( <i>Pythium</i> spp.)  Phytophthora Root Rot ( <i>Phytophthora megasperma</i> )	3 to 4 (0.09 to 0.125 lb ai/A)	Ground: Minimum 20  Aerial: Minimum 5	2 days	<p><b>[Resistance Management]</b>  <b>[Foliar application of]</b> [V-10161 4 SC Fungicide must be tank mixed with a labeled rate of another fungicide active against the target pathogen, but with a different mode of action.]</p> <p><b>Injection (drip irrigation) for soilborne diseases:</b> Inject V-10161 4 SC Fungicide into the irrigation water at the defined application rates.</p> <p><b>Downy Mildew:</b> make foliar applications beginning with initial flowering, or when disease conditions are favorable, but prior to disease development. [Use the lower rate as preventive and the higher rate if disease is present.]</p> <p><b>Damping-off and Phytophthora Root Rot:</b> apply as a soil drench at planting/transplanting. As plants grow, use a soil-directed application beginning when disease conditions are favorable, but prior to disease development.</p> <p>Re-treatment interval: 10 days.</p>

continued

### SPECIFIC REQUIREMENTS – All Crops (continued)

Crops	Diseases	Application Rates		Minimum Time from Last Application to Harvest (PHI)	Specific Use Instructions
		fl oz/A	GPA Spray Mixture		
<b>Bulb Vegetables including:</b> [For Use in California Only] Beltsville Bunching Onion, Chive (fresh leaves), Chinese Chive (fresh leaves), Chinese Onion Bulb, Daylily Bulb, Elegans Hosta, Fritillaria (bulb and leaves), Garlic Bulb, Great Headed Garlic Bulb, Green Onion, Kurrant, Lady's Leek, Leek, Lily Bulb, Macrostem Onion, Onion (bulb and fresh), Pearl Onion, Potato Onion Bulb, Shallot (bulb and fresh leaves), Serpent Garlic Bulb, Tree Onion Tops, Wild Leek	Downy Mildew ( <i>Peronospora destructor</i> )	3 to 4 (0.09 to 0.125 lb ai/A)	Ground: Minimum 20  Aerial: Minimum 5	2 days	<b>Resistance Management</b> V-10161 4 SC Fungicide must be tank mixed with a labeled rate of another fungicide active against the target pathogen, but with a different mode of action.  <b>Downy Mildew:</b> Tank mix V-10161 4 SC with non-ionic surfactant (NIS) and make foliar applications on a 7- to 10-day schedule beginning with initial flowering, or when disease conditions are favorable, but prior to disease development. Use the low rate and longer interval as preventive applications. Use the higher rate and shorter interval if disease is present.

continued



## SPECIFIC REQUIREMENTS – All Crops (continued)

Crops	Diseases	Application Rates		Minimum Time from Last Application to Harvest (PHI)	Specific Use Instructions
		fl oz/A	GPA Spray Mixture		
<b>Citrus Fruit[*]:</b> Australian Desert Lime Australian Fingerlime Australian Round Lime Brown River Finger Lime Calamondin Citron Citrus hybrids Grapefruit Japanese Summer Grapefruit Kumquat Lemon Lime Mediterranean Mandarin Mount White Lime New Guinea Wild Lime Orange, Sour Orange, Sweet Pummelo Russell River Lime Satsuma Mandarin Sweet Lime Tachibana Orange Tahiti Lime Tangelo Tangerine (mandarin) Tangor Trifoliate Orange Uniq Fruit cultivars, varieties, and/or hybrids of these.	Phytophthora Foot Rot and Root Rot <i>(Phytophthora spp.)</i>	3 to 4 (0.09 to 0.125 lb ai/A)	Ground: Minimum 10	30 days	<p><b>Resistance Management</b>            [V-10161 4 SC Fungicide must be tank mixed with a labeled rate of another fungicide active against the target pathogen, but with a different mode of action.]</p> <p>Use V-10161 4 SC Fungicide as one component of an integrated disease management strategy that includes good cultural practices and use of rootstocks that are more tolerant to disease.</p> <p>Apply before disease development.</p> <p>Do not apply more than one application of V-10161 4 SC Fungicide per year.</p> <p><b>New or Established Plantings:</b>            Apply to the soil beneath the canopy or apply through the drip or micro-sprinkler irrigation system following the use directions in the Chemigation (Sprinkler Irrigation) section.</p> <p><b>Individual Tree Application to New Plantings or Resets:</b> Mix 3 to 4 ounces of V-10161 4 SC Fungicide in 20 gallons of water. Apply up to 10 fl oz of finished solution uniformly around the base of each tree, directed at the root zone. If rainfall does not occur within 24 hours after application, irrigate with sufficient water to move product into the root zone. Depending on soil type and root depth, this could require 1/2 to 1 inch of water.</p>

[\*Not for use in California.]

continued

## SPECIFIC REQUIREMENTS – All Crops (continued)

Crops	Diseases	Application Rates		Minimum Time from Last Application to Harvest (PHI)	Specific Use Instructions
		fl oz/A	GPA Spray Mixture		
<b>Cucurbit Vegetables:</b> Acorn Squash; Balsam Apple; Balsam Pear; Bittermelon; Butternut Squash; Calabaza; Cantaloupe; Chayote, Fruit; Chinese Cucumber; Chinese Okra; Chinese Preserving Melon; Chinese Waxgourd; Citron Melon; Cucumber; Cucuzza; Gherkin; Gourd, Edible; Hechima; Hubbard Squash; Hyotan; <i>Momordica</i> spp; Muskmelon; Pumpkin; Spaghetti Squash; Summer Squash; Watermelon; Winter Squash	Downy Mildew ( <i>Pseudoperonospora cubensis</i> )  Phytophthora Blight/Crown Rot ( <i>Phytophthora capsici</i> )	3 to 4 (0.09 to 0.125 lb ai/A)	Ground: Minimum 20  Aerial: Minimum 5	2 days	<p><b>[Resistance Management]</b>  <b>[Foliar applications of]</b> [V-10161 4 SC Fungicide must be tank mixed with a labeled rate of another fungicide active against the target pathogen, but with a different mode of action.]</p> <p>[Do not apply sequentially.]</p> <p>[Make no more than 2 applications per season.]</p> <p><b>Injection (drip irrigation) for soilborne diseases:</b> Inject V-10161 4 SC Fungicide into the irrigation water at the defined application rates.</p> <p><b>Downy Mildew:</b> make foliar applications on a 7- to 10-day schedule beginning when conditions are favorable, but prior to disease development. Use the [lower rate and longer interval as preventive applications. Use the higher rate and] shorter interval if disease is present.</p> <p><b>Phytophthora Blight/Crown Rot:</b> apply as a soil or foliar application on a 7- to 10-day schedule beginning when conditions are favorable for disease development and prior to disease onset. Begin application at planting/transplanting for best results.</p>

continued

### SPECIFIC REQUIREMENTS – All Crops (continued)

Crops	Diseases	Application Rates		Minimum Time from Last Application to Harvest (PHI)	Specific Use Instructions
		fl oz/A	GPA Spray Mixture		
<b>Fruiting Vegetables including:</b> African Eggplant Bush Tomato Bell Pepper Cocona Currant Tomato Eggplant Garden Huckleberry Goji Berry Groundcherry Martynia Naranjilla Okra Pea Eggplant Pepino Nonbell Pepper Roselle Scarlet Eggplant Sunberry Tomatillo Tomato Tree Tomato cultivars, varieties, and/or hybrids of these	Late Blight ( <i>Phytophthora infestans</i> )  Phytophthora Root Rot Root Rot ( <i>Phytophthora parasitica</i> )  Phytophthora Blight ( <i>Phytophthora capsici</i> )	3 to 4 (0.09 to 0.125 lb ai/A)	Ground: Minimum 20  Aerial: Minimum 5	2 days	<p><b>[Resistance Management]</b>  [Foliar applications of] [V-10161 4 SC Fungicide must be tank mixed with a labeled rate of another fungicide active against the target pathogen, but with a different mode of action.]</p> <p><b>Injection (drip irrigation) for soilborne diseases:</b> Inject V-10161 4 SC Fungicide into the irrigation water at the defined application rates.</p> <p><b>Phytophthora Diseases:</b> apply as a soil or foliar application on a 7- to 10-day schedule beginning when conditions are favorable for disease development and prior to disease onset. Begin application at planting/transplanting for best results.</p>

continued

### SPECIFIC REQUIREMENTS – All Crops (continued)

Crops	Diseases	Application Rates		Minimum Time from Last Application to Harvest (PHI)	Specific Use Instructions
		fl oz/A	GPA Spray Mixture		
<b>Grapes</b> <b>(Including Fruit, small, vine climbing, except fuzzy kiwifruit, subgroup 13-07F)</b> Amur River Grape, Gooseberry Grape Kiwifruit, Hardy Maypop Schisandra Berry Cultivars, varieties, and/or hybrids of these	Downy Mildew ( <i>Plasmopara viticola</i> )	3 to 4 (0.09 to 0.125 lb ai/A)	Ground: Minimum 20  Aerial: Minimum 5	21 days	<b>Resistance Management</b> V-10161 4 SC Fungicide must be tank mixed with a labeled rate of another fungicide active against the target pathogen, but with a different mode of action.  <b>Downy Mildew:</b> make foliar applications on a 7- to 14-day schedule beginning when conditions are favorable, but prior to disease development. Use the lower rate and longer interval as preventive applications. Use the higher rate and shorter interval if disease is present.

### SPECIFIC REQUIREMENTS – All Crops (continued)

Crop	Diseases	Application Rates		Minimum Time from Last Application to Harvest (PHI)	Specific Use Instructions
		fl oz/A	GPA Spray Mixture		
<b>Hops[*]</b>	Downy Mildew ( <i>Pseudoperonospora humuli</i> )	4 (0.125 lb ai/A)	Ground: Minimum 50  Aerial: Minimum 5	24 days	<b>Resistance Management</b> V-10161 4 SC Fungicide must be tank mixed with a labeled rate of another fungicide active against the target pathogen, but with a different mode of action.  Make foliar applications on a 10- to 14-day schedule beginning when conditions are favorable, but prior to disease development.

[\*Not for use in California.]

continued

**SPECIFIC REQUIREMENTS – All Crops** (continued)

Crops	Diseases	Application Rates		Minimum Time from Last Application to Harvest (PHI)	Specific Use Instructions
		fl oz/A	GPA Spray Mixture		
<b>Leafy Vegetables (Except Brassica Vegetables):</b> Amaranth, Chinese Spinach; Arugula, Roquette; Cardoon; Celery; Celtuce; Chinese Celery; Chervil; Chrysanthemum, Edible-leaved; Chrysanthemum, Garland; Corn Salad; Cress, Garden; Cress, Upland; Dandelion; Dock, Sorrel; Endive, Escarole; Fennel; Florence; Lettuce, Head and Leaf; Orach; Parsley; Purslane, Garden; Purslane, Winter; Radicchio, Red Chicory; Rhubarb; Spinach; Spinach, New Zealand; Spinach, Vine; Swiss Chard	Downy Mildews ( <i>Bremia</i> , <i>Peronospora</i> , <i>Plasmopara</i> and others)  White Rust ( <i>Albugo occidentalis</i> )	3 to 4 (0.09 to 0.125 lb ai/A)	Ground: Minimum 20  Aerial: Minimum 5	2 days	<p><b>[Resistance Management]</b>  <b>[Foliar applications of]</b> [V-10161 4 SC Fungicide must be tank mixed with a labeled rate of another fungicide active against the target pathogen, but with a different mode of action.]</p> <p><b>Injection (drip irrigation) for soilborne diseases:</b>  Inject V-10161 4 SC Fungicide into the irrigation water at the defined application rates.</p> <p><b>Downy Mildew and White Rust:</b> make foliar applications on a 7- to 10-day schedule beginning when conditions are favorable, but prior to disease development. Use the lower rate and longer interval as preventive applications. Use the higher rate and shorter interval if disease is present.</p>

continued

### SPECIFIC REQUIREMENTS – All Crops (continued)

Crops	Diseases	Application Rates		Minimum Time from Last Application to Harvest (PHI)	Specific Use Instructions
		fl oz/A	GPA Spray Mixture		
<b>Root and Tuber Vegetables [Except Carrot and Potato]:</b> Arracacha, Arrowroot, Black Salsify, Cassava (bitter and sweet), Celeriac, Chayote (root), Chicory, Chinese Artichoke, Chufa, Dasheen (taro), Edible Burdock, Edible Canna, Garden Beet, Ginger, Ginseng, Horseradish, Jerusalem Artichoke, Leren, Oriental Radish, Parsnip, Radish, Rutabaga, Salsify, Skirret, Spanish Salsify, Sugar Beet, Sweet Potato, Tanier, True Yam, Turmeric, Turnip, Turnip-rooted Chervil, Turnip-rooted Parsley, Yam Bean	Pythium Diseases ( <i>Pythium</i> spp.)  Phytophthora Diseases ( <i>Phytophthora</i> spp.)	3 to 4 (0.09 to 0.125 lb ai/A)	Ground: Minimum 20  Aerial: Minimum 5	7 days	<b>[Resistance Management]</b> <b>[Foliar applications of]</b> [V-10161 4 SC Fungicide must be tank mixed with a labeled rate of another fungicide active against the target pathogen, but with a different mode of action.]  Recommended spray interval: 10 days.  <b>Restriction</b> Do not use on varieties of turnips such as fodder turnips intended for livestock use.

continued

### SPECIFIC REQUIREMENTS – All Crops (continued)

Crops	Diseases	Application Rates		Minimum Time from Last Application to Harvest (PHI)	Specific Use Instructions
		fl oz/A	GPA Spray Mixture		
<b>Carrot</b>	For suppression of: Cavity Spot ( <i>Pythium violae</i> )  Root Dieback (Forking and Stubbing) ( <i>Pythium ultimum</i> and <i>Pythium irregulare</i> )	4 (0.125 lb ai/A)	In-furrow: 5 to 10  Side-dress: 20 to 40  Ground: Minimum 20	7 days	<b>Resistance Management</b> [Foliar applications of] [V-10161 4 SC Fungicide must be tank mixed with a labeled rate of another fungicide active against the target pathogen, but with a different mode of action.]  A maximum of 3 applications of V-10161 4 SC Fungicide are allowed at the 4 oz rate with no more than two sequential applications.  Apply V-10161 4 SC Fungicide at any of the following application timings/methods: 1) Preplant incorporated treatment (broadcast or band) to a 2 inch depth prior to planting. Use sufficient water to ensure uniform soil coverage. 2) A foliar application at emergence. 3) Beginning 28 to 50 days after planting (shorter if conditions are favorable for disease and longer if they are not). 4) Continue applications on a 14- to 21-day interval by chemigation, by ground equipment with a spray directed to the base of the plant, or shanked in with liquid fertilizer. All ground applications must be followed by irrigation/rainfall with 0.25 to 1 inch of water to promote movement of material into the root zone. 5) Irrigation: Inject V-10161 4 SC Fungicide into the irrigation water (do not use drip irrigation).

continued



### SPECIFIC REQUIREMENTS – All Crops (continued)

Crops	Diseases	Application Rates		Minimum Time from Last Application to Harvest (PHI)	Specific Use Instructions
		fl oz/A	GPA Spray Mixture		
Potato	(Note to EPA Reviewer: Valent will not sell, distribute or market V-10161 4 SC with use directions for soil application method on potatoes until Valent has been informed by EPA in writing that this condition of registration has been amended.)				
	Late Blight (Phytophthora infestans)	4 (0.125 lb ai/A)	Ground: Minimum 20  Aerial: Minimum 5	7 days	[Resistance Management] [Foliar applications of] [V-10161 4 SC Fungicide must be tank mixed with a labeled rate of another fungicide active against the target pathogen, but with a different mode of action.]  Make foliar applications on a 7- to 10-day schedule beginning when conditions are favorable, but prior to disease development.
	Pink Rot (Phytophthora erythroseptica)	4 (0.125 lb ai/A)	In-furrow: 5 to 10  Side-dress: 20 to 40	7 days	[Resistance Management] [V-10161 4 SC Fungicide must be tank mixed with a labeled rate of another fungicide active against the target pathogen, but with a different mode of action.]  Apply V-10161 4 SC Fungicide using a 6 to 8 inch band directly over the seed piece, or in the furrow where the seed piece is to be dropped, prior to furrow closure. A side-dressing application of V-10161 4 SC Fungicide should be made between hilling and tuber initiation. A number of factors affect pink rot severity including: variety susceptibility, field history, environmental conditions, etc. Additional applications of an effective material on pink rot may be necessary.

continued

### SPECIFIC REQUIREMENTS – All Crops

Crops	Diseases	Application Rates		Minimum Time from Last Application to Harvest (PHI)	Specific Use Instructions
		fl oz/A	GPA Spray Mixture		
<b>Tobacco</b> [Not for use in California]	Black Shank* ( <i>Phytophthora nicotianae</i> ) Pythium Root Rot ( <i>Pythium</i> spp.)	3 to 4 (0.09 to 0.125 lb ai/A)	Ground: Minimum 20	N/A	<p><b>Resistance Management</b> Do not make sequential applications of V-10161 4 SC Fungicide; alternate with a fungicide which has a different mode of action (different FRAC group) against the target pathogen.</p> <p>Make no more than 2 soil applications per season.</p> <p>Minimum treatment interval 14 days.</p> <p><b>At-planting program</b> For control of black shank or Pythium root rot, apply preventively in transplant water (setter water) at planting. An additional application of V-10161 4 SC Fungicide can be made as late as layby (last cultivation), if a fungicide with a different mode of action was used in the interim. When treating after transplanting, direct nozzles to cover soil beneath lower leaves; incorporate immediately with cultivator.</p> <p><b>or</b></p> <p><b>Post-transplant program</b> If a fungicide with a different mode of action is used at or immediately after transplanting, one application of V-10161 4 SC Fungicide can be made at either first cultivation or layby (last cultivation). Direct nozzles to cover soil beneath lower leaves; incorporate immediately with cultivator.</p>

\*For best control of black shank with V-10161 4 SC Fungicide, use with tobacco varieties that have moderate-to-high resistance to the black shank pathogen. Consult your local Cooperative Extension Service office or university specialist for information on variety selection.

continued

### SPECIFIC REQUIREMENTS – All Crops

Crops	Diseases	Application Rates		Minimum Time from Last Application to Harvest (PHI)	Specific Use Instructions
		fl oz/A	GPA Spray Mixture		
<b>Tobacco</b> [Not for use in California]	Blue Mold ( <i>Peronospora tabacina</i> )	3 to 4 (0.09 to 0.125 lb ai/A)	Ground: Minimum 20  Aerial: Minimum 10	7 days	<p><b>[Resistance Management]</b> [Foliar applications of] [V-10161 4 SC Fungicide must be tank mixed with a labeled rate of another fungicide active against the target pathogen, but with a different mode of action.]</p> <p>Make no more than 2 foliar applications per season.</p> <p>Apply as a foliar spray prior to disease onset or at first indication that blue mold is in the area. A second foliar application may be made, with a minimum treatment interval of 7 days between foliar applications.</p>

## SPECIFIC REQUIREMENTS – All Crops

Crops	Diseases	Application Rates		Minimum Time from Last Application to Harvest(PHI)	Specific Use Instructions
		fl oz/A	GPA Spray Mixture		
<p><b>Non-bearing Fruit Trees</b> (Young trees which will not produce fruits at least one year after final product application including apple, cherry, grapefruit, lemon, lime, orange, peach, pear and plum)[*]</p> <p><b>Non-bearing Nut Trees</b> (Young trees which will not produce nuts at least one year after final product application including almond, hazelnut, pecan, pistachio and walnut) [*]</p>	<p>Collar Rot Crown Rot Root Rot (<i>Phytophthora</i> spp.)</p>	<p>4 (0.125 lb ai/A)</p>	<p>Ground Minimum: 20</p>	<p>1 year</p>	<p><b>Resistance Management</b> [V-10161 4 SC Fungicide must be tank mixed with a labeled rate of another fungicide active against the target pathogen, but with a different mode of action.]</p> <p>Do not apply sequentially, alternate with a labeled fungicide with a different mode of action on the target pathogen.</p> <p>Use V-10161 4 SC Fungicide as one component of an integrated disease management strategy that includes good cultural practices and use of rootstocks that are more tolerant to disease.</p> <p>Apply before disease development. Reapply if necessary, but no sooner than 14 days from the last application.</p> <p>Do not apply more than three (3) applications of V-10161 4 SC Fungicide per year.</p> <p>[For use only in commercial fruit or nut orchards.]</p> <p><b>Restrictions</b> Do not apply within 1 year of fruit harvest.</p> <p>Do not apply within 1 year of nut harvest.</p> <p>Do not graze or feed cover crops in treated orchards.</p>

[\*Not for use in California.]

continued

Crops	Diseases	Application Rates		Minimum Time from Last Application to Harvest (PHI)	Specific Use Instructions	
		fl oz/A	GPA Spray Mixture			
<b>Non-bearing Fruit Trees</b> (Young trees which will not produce fruits at least one year after final product application including apple, cherry, grapefruit, lemon, lime, orange, peach, pear and plum)[*]	Collar Rot Crown Rot Root Rot ( <i>Phytophthora</i> spp.)	4 (0.125 lb ai/A)	Ground Minimum: 20	1 year	<b>Soil Spray (broadcast or band):</b> Apply to the soil in the early spring before growth starts and/or in the fall before the ground freezes. The treated area is based on the area under the tree canopy or the area of the sprayed row. Placement in the root zone is critical for pathogen control. For soil surface sprays, rainfall will move V-10161 4 SC Fungicide into the root zone, but if rain is not expected within 24 hours after application, irrigate with sufficient water to move product into the root zone. Depending on soil type and root depth, this could require 1/2 to 1 inch of water.  <b>Drench Application:</b> Use 4 fl oz/100 gallons for drench applications. Apply the diluted mixture around the trunk of each tree in early spring before growth starts and in the fall before the ground freezes. On new plantings, delay the first application until 2 weeks after planting. Use enough solution to wet the root zone of the trees. Additional irrigation following application may be needed to move the product into the root zone.	
<b>Non-bearing Nut Trees</b> (Young trees which will not produce nuts at least one year after final product application including almond, hazelnut, pecan, pistachio and walnut) [*]					<b>Drench Application Rates</b>	
					<b>Trees/Acre</b>	<b>fl oz of mixture per tree</b>
					242	53.0
					340	37.6
					605	21.0
					1,089	11.75
					<b>Chemigation:</b> Use 4 fl oz/acre applied through the drip or micro-sprinkler irrigation system following the use directions in the Chemigation (Sprinkler Irrigation) section.	

[\*Not for use in California]

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## TURFGRASS

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V-10161 4 SC Fungicide is effective at preventing and controlling damping-off, root rot and stem diseases caused by Pythium species. Pythium diseases are referred to as damping-off, Pythium blight, greasy spot, cottony blight and snow blight depending on the type of damage and symptoms caused. Pythium diseases are common in turfgrass areas with poor soil drainage and a wet turfgrass canopy. High humidity and high temperatures provide an ideal environment for development of Pythium diseases. Pythium diseases occur in all cool season grasses, but are especially prevalent in creeping bentgrass, annual bluegrass and perennial ryegrass.

In Hawaii: Do not apply V-10161 4 SC Fungicide to turfgrass.

# DIRECTIONS FOR USE ON TURFGRASS

Turfgrass	Diseases	Application Rate	Special Instructions
<b>Established and Overseeded Turfgrass:</b> Golf Course Turf Residential Turf Commercial Turf (lawns and landscape areas around commercial institutional, public and industrial buildings) Sod Farms	Pythium diseases ( <i>Pythium</i> Blight, Damping-off, Greasy Spot, Cottony Blight, Snow Blight)	0.2 fl oz per 1000 sq ft (8.7 fl oz/A)	<p><b>[Resistance Management]</b>            [V-10161 4 SC Fungicide must be tank mixed with a labeled rate of another fungicide active against the target pathogen, but with a different mode of action.]</p> <p>Do not apply more than two (2) applications of V-10161 4 SC Fungicide per season.</p> <p>Apply in a minimum volume of 2 gals spray mixture per 1000 sq ft</p> <p><b>Overseeded Turf:</b> Apply after seed germination to prevent Pythium damping-off.</p> <p><b>Established Turf:</b> Apply when conditions favor disease development. Favorable conditions include high temperatures and high humidity.</p> <p>If necessary, make an additional application on a 14-day interval.</p> <p><b>Restriction</b>            Do not apply more than a total of 0.4 fl oz per 1000 sq ft per year (0.54 lb ai/A per year).</p>

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## ORNAMENTAL PLANTS

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V-10161 4 SC Fungicide prevents water mold, root rot, stem rot, crown rot and damping-off caused by Pythium and Phytophthora pathogens (water molds) in ornamental plants. V-10161 4 SC Fungicide is mixed with water and applied as a soil drench at the time of seeding or transplanting. V-10161 4 SC Fungicide may be used on container, bench, or bed grown ornamentals in greenhouses, shadehouses, lathhouses or outdoor nurseries, on conifers including Christmas trees and for use on ornamentals grown for outdoor landscapes.

**IMPORTANT:** The large number of existing ornamental species and their varieties and cultivars coupled with the constant introduction of new varieties makes it impossible to field test V-10161 4 SC Fungicide in every locale where it is sold or in all of the combinations of location and plant varieties. Further differences include the soil or media type; pH; moisture or fertility; environmental conditions such as temperature, lighting or degree days; horticultural practice; the manner of use and application of this product. To ensure that V-10161 4 SC Fungicide is compatible with the ornamental plant variety or cultivar under your specific conditions, test this product on a limited scale and observe for phytotoxicity or other unintended effects for two weeks before making large scale applications.

In Hawaii: Do not apply V-10161 4 SC Fungicide to ornamental plants.



# DIRECTIONS FOR USE ON ORNAMENTAL PLANTS

Ornamentals	Diseases	Product Rates	Special Instructions														
Bedding Plants Christmas Trees Conifers Flowering Plants Foliage Plants Ground Covers Non-Bearing Fruit Trees Non-Bearing Nut Trees Ornamentals Ornamental Trees Shrubs Vines	Damping-off Downy Mildew Phytophthora Root Rot Pythium Blight	1 to 4 fl oz per 100 gals	<p><b>Resistance Management</b> [Foliar applications of] [V-10161 4 SC Fungicide must be tank mixed with a labeled rate of another fungicide active against the target pathogen, but with a different mode of action.]</p> <p>Do not apply more than two (2) applications of V-10161 4 SC Fungicide per cropping cycle.</p> <p>Do not apply sequentially, alternate with a labeled fungicide with a different mode of action on the target pathogen.</p> <p>Apply before disease development. Use the higher rate when treating plants with a high potential for disease development. Reapply as necessary, but no more than once every 14 days.</p> <p>Foliar Application: For foliar sprays, 100 gallons of spray mix will treat approximately 20,000 sq ft of area. Apply the spray mixture to all plant surfaces and to the point of runoff.</p> <p>Drench Application: Use enough solution to wet the root zones of plants. Use the information below as a guide for drench application.</p> <p>Container grown plants: Apply in volume as listed. For pot sizes other than those listed, adjust volume proportionally.<sup>1</sup></p> <table><tr><th>Pot diameter</th><th>fl oz of drench solution per pot</th></tr><tr><td>4</td><td>3</td></tr><tr><td>5</td><td>4</td></tr><tr><td>6</td><td>6</td></tr><tr><td>8</td><td>10</td></tr><tr><td>10</td><td>20</td></tr><tr><td>12</td><td>30</td></tr></table> <p>Plants grown in flats or beds: Apply at a volume of 1 to 2 pints per square foot of soil surface (5 to 10 qts per 10 sq ft).<sup>1</sup></p>	Pot diameter	fl oz of drench solution per pot	4	3	5	4	6	6	8	10	10	20	12	30
Pot diameter	fl oz of drench solution per pot																
4	3																
5	4																
6	6																
8	10																
10	20																
12	30																

continued

<sup>1</sup>Not to exceed lb ai per application on a per acre basis indicated below.

- For hand harvesting, thinning, pruning and pinching of cut flowers, a 6 day reentry interval following the last application of V-10161 4SC Fungicide must be observed.
- Do not apply more than a total of 8.7 fl oz (0.27 lb ai) of V-10161 4 SC Fungicide per acre per application and 17.4 fl oz (0.54 lb ai) of V-10161 4 SC Fungicide per acre per year.

**NOTE:** Since ornamental varieties are numerous, constantly changing and may react differently to V-10161 4 SC and tank mixtures including V-10161 4 SC Fungicide, test the product(s) on a small number of plants before making large scale applications.

#### RATE CONVERSION CHART

Amount of V-10161 4 SC per 100 gals (fl oz)	Amount of V-10161 4 SC Fungicide to add to water to achieve desired volume (fl oz) of spray or drench solution									
	1 gallon		5 gallons		10 gallons		25 gallons		50 gallons	
	fl oz	ml	fl oz	ml	fl oz	ml	fl oz	ml	fl oz	ml
4	0.04	1.2	0.2	6	0.4	12	1	30	2	60
6	0.06	1.8	0.3	9	0.6	18	1.5	45	3	90
8	0.08	2.4	0.4	12	0.8	24	2	60	4	120

For example: if the use rate is 4 fl oz of V-10161 4 SC Fungicide per 100 gallons, and the desired volume of finished solution is 25 gallons, mix 1.0 fl oz of V-10161 4 SC Fungicide in 25 gallons of water.

## STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage, disposal or cleaning of equipment.

### PESTICIDE STORAGE

Keep pesticide in original container.

Do not put concentrate or dilute into food or drink containers.

Store in a cool dry place.

Do not store or transport near feed or food.

Do not store at temperature below 32°F. If the product is exposed to temperatures below 32°F, thaw at 50°F or higher and shake gently to unify the product.

For help with any spill, leak, fire or exposure involving this material, call day or night 800-892-0099.

### PESTICIDE DISPOSAL

Waste resulting from the use of this product must be disposed of on site or at an approved waste disposal facility.

### CONTAINER HANDLING

Nonrefillable container. Do not reuse or refill this container. Clean container promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank and drain for 10 seconds after the flow begins to drip. Fill the container 1/4 full with water and recap. Shake for 10 seconds. Pour rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Drain for 10 seconds after the flow begins to drip. Repeat this procedure two more times. Then offer for recycling if available or puncture and dispose of in a sanitary landfill, or by incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of smoke.

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Manufactured for:

**Valent U.S.A. Corporation**

P.O. Box 8025

Walnut Creek, CA 94596-8025

Made in U.S.A.

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